EASTERN MUNICIPAL WATER DISTRICT

February 15, 2001

Ms. Lauren V. Fondahl
Biosolids Coordinator
Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Submittal of Sludge Use and Disposal Information for Calendar Year 2000

Dear Ms. Fondahl:

This letter and enclosed report serves to comply with 40 CFR Part 503.18 reporting requirements due by February 19, of each year.

Eastern Municipal Water District (EMWD) provides water and sewer service to a population of nearly 440,000 people. EMWD owns and operates five regional water reclamation facilities (RWRFs) within its 550 square mile area. The Sun City RWRF was off-line and influent flows have been diverted to the Perris Valley RWRF.

The following information is provided according to Part 503 regulations:

1. The five RWRFs treating domestic sewage, their design capacity, and corresponding state-issued Wastewater Discharge Permit numbers are:

Name of Facility	Design Capacity	Permit No.
Hemet/San Jacinto RWRF	11.0 MGD	Order No. 88-94
Moreno Valley RWRF	16.0 MGD	Order No. 90-151
Perris Valley RWRF	11.0 MGD	Order No. 90-135
Sun City RWRF	3.0 MGD	Order No. 90-140
Temecula Valley RWRF	8.0 MGD	Order No. 2000-165

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570 Internet: www.emwd.org

2. EMWD is the owner and operator of the five RWRFs. We are a "Special District" according to the California Code of Regulations.

3. A total of 42,733 wet tons of biosolids were produced by the four RWRFS during calendar year 2000. About 70 (seventy) percent of the biosolids generated (30,317 wet tons, or 5,457 dry tons, assuming an average percent solids of 18) were either composted to Class A, Exceptional Quality standards (16,184 wet tons) or land applied at Class B standards (14,132 wet tons) by a private contractor. The name, address, and phone number of the contractor is:

    Synagro Technologies, Inc.
    P.O. Box 7027
    Corona, CA 91718-7027
    Phone Number: (909) 277-2662

    The remaining 30 (thirty) percent of the biosolids generated by the District (12,417 wet tons, or 1055 dry tons, assuming an average percent solids of 18) were pasteurized or solar-dried to Class A standards by the District at the Perris Valley RWRF, and land applied on 243 acres of District property.

4. The District is certifying that the biosolids that were land applied by Synagro Technologies, Inc., met Class B, Table 3 metals and vector attraction reduction requirements according to the Part 503 regulations. Attached to this report is a copy of the certification statements for the Temecula Valley, Hemet/San Jacinto, Moreno Valley RWRFs, and the appropriate supporting data. The Perris Valley RWRF biosolids hauled to Synagro were composted to meet Class A, exceptional quality standards, due to their inability to meet Class B standards.

5 As noted above, EMWD pasteurized or solar-dried most of the sludge generated (12,417 wet tons or 1055 dry tons) at the Perris Valley RWRF to a Class A level. We have enclosed a new electronic certification report. This report contains all data generated during the year, and contains one violation which is explained below. The vector/attraction reduction requirement was achieved by drying the biosolids to seventy five percent solids or greater. However, the electronic certification statement for the Class A biosolids from the Perris Valley RWRF contains a minimum number of 71.5 percent solids for a sample taken on April 12. The biosolids were not land applied until late August/early September (2000), and in January, 2001, when the percent solids were above 75 percent (in compliance). All Salmonella results met compliance except for one sample with a result of 7 MPN per 4 grams of total solids from stockpile non-pasteurized bed 1, which unfortunately was land applied. We did not land apply the biosolids from stockpile

non-pasteurized bed 9 which included a Salmonella result of 93. The biosolids from pasteurized bed SE included a Salmonella result of 4 MPN per 4 grams of total solids, but this value was not land applied until results showed compliance. The biosolids were land applied on various sites from August 30 to September 8, 2000, and January 3 to 5, 2001. The total acreage used for land application was 167.64 acres, and 74 acres, respectively. Heavy metals data showed compliance with Table 3 metals standards.

If you need any other information, please contact Mike Luker, Director of Water Reclamation, at (909) 928-3777, ext. 6255, or David Morycz, Manager of Environmental and Regulatory Compliance, ext. 6325.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Operations and Administration

cc: Mike Luker, Director of Water Reclamation
David Morycz, Manager of Environmental and Regulatory Compliance
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WP\ENVIRON\BRIGGS\2000EPA.REP

Class B Biosolids Production

for

Calendar Year

2000

Eastern Municipal Water District

Sludge Disposal Report for 2000

		Hemet-San Jacinto	Moreno Valley	Perris Valley	Temecula Valley	Total
		Product Amount	Product Amount	Product Amount	Product Amount	Product Amount
Composted	Jan	228.32	502	1,251.74	120.39	2,102.45
	Feb	309.84	312.59	328.89	247.49	1,198.81
	Mar	217.34	663.11	516.82	179.16	1,576.43
	Apr	210.99	653.22	231.79	299.72	1,395.72
	May	138.39	645.46		309.74	1,093.59
	Jun	194.49	719.42		474.64	1,388.55
	Jul	670.69	156.2		435.39	1,262.28
	Aug	79.86	546.32		378.75	1,004.93
	Sep	197.86	366.4		359.2	923.46
	Oct	267.73	613.29	38.97	337.16	1,257.15
	Nov	519.52	560.31	403.72	352.46	1,836.01
	Dec	80.2	621.77	168.64	274.25	1,144.86
	Total	**3,115.23**	**6,360.09**	**2,940.57**	**3,768.35**	**16,184.24**
Land Applied	Jan	622.24	483.2		575.75	1,681.19
	Feb	388.25	207.39		493.52	1,089.16
	Mar	710.22	360.61		583.68	1,654.51
	Apr	409.45	182.46		369.23	961.14
	May	488.81	390.74		410.53	1,290.08
	Jun	200.18	274.21		240.28	714.67
	Jul	264.56	225.95		151.84	642.35
	Aug	142.46	543.05		342.72	1,028.23
	Sep	436.48	587.03		381.4	1,404.91
	Oct	387.71	392.59		416.69	1,196.99
	Nov	298.37	297.29		311.51	907.17
	Dec	442.28	618.37		501.27	1,561.92
	Total	**4,791.01**	**4,562.89**		**4,778.42**	**14,132.32**
Total		**7,906.24**	**10,922.98**	**2,940.57**	**8,546.77**	**30,316.56**

Source Control from Environmental and Regulatory Compliance Division Data. Sludgedisposal99.bqy

CERTIFICATION STATEMENTS

FOR EACH

REGIONAL WATER RECLAMATION FACILITY

FOR

CALENDAR YEAR

2000

EASTERN MUNICIPAL WATER DISTRICT

50 years

June 16, 2000

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Gray:

Attached please find the certification statements for the first quarter (January through March, 2000) for Hemet/San Jacinto, Temecula Valley and Moreno Valley RWRFs. Due to personnel shortages at the Moreno Valley RWRF we do not have the normal amount of volatile solids reduction values. Additionally, we suspect the reported values in February are flawed and a note to that effect is included with the attached Quarterly Sludge Report.

Please accept our apologies for the delay in submitting this report. The 2nd Quarter Report will be submitted in July.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or Gary Ethridge at ext. 6241.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Administration and Operations

cc: Mike Luker, Director of Water Reclamation
Gary Ethridge, Director of Environmental & Regulatory Compliance

J:\WORDPROC\WP\SSHARED\SLUDGE1.WPD

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570

SLUDGE CERTIFICATION FORM - Moreno Valley RWRF
January - March, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	< 4.2 / < 5	41	75
Cadmium	1 / 1	39	85
Copper	320 / 420	1,500	4,300
Lead	17 / 25	300	840
Mercury	2.6 / 3	17	57
Molybdenum	6 / 7	NA	75
Nickel	24 / 34	420	420
Selenium	6 / 7	100	100
Zinc	326 / 390	2,800	7,500
TKN	6.9 % / 7.3 %	NA	NA
Ammonia-N	0.8 % / 0.9 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

6/16/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Hemet/San Jacinto RWRF for January - March, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	< 3.2 / < 5	41	75
Cadmium	2 / 2	39	85
Copper	526 / 630	1,500	4,300
Lead	38 / 49	300	840
Mercury	3 / 3	17	57
Molybdenum	16 / 21	NA	75
Nickel	23 / 28	420	420
Selenium	10 / 11	100	100
Zinc	883 / 960	2,800	7,500
TKN	5.7 % / 6 %	NA	NA
Ammonia-N	0.6 % / 0.6 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

☐ Class A Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

6/16/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

Eastern Municipal Water District
Quarterly Sludge Report
06-16-2000 2:08 PM

				Moreno Valley RWRF		
					BP-CAKE	
				Results		Results
02/14/00 *				20.75672		
02/28/00 *				29.64359		
03/02/00				45.42045		
03/06/00				38.27483		
03/13/00				44.36682		
03/16/00				39.5612		
03/23/00				47.4991		
Average			0	35.31941		
Maximum				47.4991		
Minimum				6.65181		

* Volatile solids testing performed at MVRWRF in February were performed by inexperienced temporary employees due to staffing shortages.

Source Control from MACS

Eastern Municipal Water District
Quarterly Sludge Report
06-12-2000 12:13 PM

			Hemet-San Jacinto RWRF		
					BP-CAKE
			Results		Results
01/24/00	%		44.35484		
01/27/00	%		34.91925		
01/31/00	%		52.37561		
02/03/00	%		37.22084		
02/07/00	%		52.37561		
02/10/00	%		52.37561		
02/14/00	%		44.35484		
03/02/00	%		41.66667		
03/06/00	%		49.24242		
03/15/00	%		59.52381		
03/16/00	%		50.15432		
03/20/00	%		53.57143		
Average		.00	**47.18**		
Maximum			59.52381		
Minimum			34.91925		

Source Control from MACS

SLUDGE CERTIFICATION FORM - Temecula Valley RWRF
January - March, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	8.5 / 9	41	75
Cadmium	1 / 1	39	85
Copper	370 / 380	1,500	4,300
Lead	13 / 13	300	840
Mercury	2 / 2	17	57
Molybdenum	15 / 15	NA	75
Nickel	16 / 16	420	420
Selenium	26 / 26	100	100
Zinc	560 / 570	2,800	7,500
TKN	6.7 % / 6.7 %	NA	NA
Ammonia-N	0.7 % / 0.7 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

☐ Class A Alternative_____ ■ Class B Alternative Fecal Coliform testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext. 4235
Area Code and Telephone Number

Signature

6/16/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

EASTERN MUNICIPAL WATER DISTRICT

July 5, 2000

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Gray:

Attached please find the certification statements for the second quarter (April through June, 2000) for Hemet/San Jacinto, Temecula Valley and Moreno Valley RWRFs.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or Gary Ethridge at ext. 6241.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Administration and Operations

cc: Mike Luker, Director of Water Reclamation
Gary Ethridge, Director of Environmental & Regulatory Compliance

J:\WORDPROC\WP\$SHARED\SLUDGE1.WPD

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570

SLUDGE CERTIFICATION FORM - Moreno Valley RWRF
April through June, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	14 / 19	41	75
Cadmium	2 / 2	39	85
Copper	555 / 750	1,500	4,300
Lead	16 / 20	300	840
Mercury	<3 / <3	17	57
Molybdenum	15 / 17	NA	75
Nickel	40 / 66	420	420
Selenium	17 / 22	100	100
Zinc	610 / 800	2,800	7,500
TKN	6.7 % / 6.7 %	NA	NA
Ammonia-N	0.8 % / 0.8 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

A. Pack
Signature

7/6/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Rehle/San Jacinto RWRF for April through June, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	4 / 4	41	75
Cadmium	2 / 2	39	85
Copper	455 / 520	1,500	4,300
Lead	22 / 23	300	840
Mercury	<3 / 2	17	57
Molybdenum	13 / 13	NA	75
Nickel	14 / 14	420	420
Selenium	15 / 15	100	100
Zinc	725 / 840	2,800	7,500
TKN	6 % / 6 %	NA	NA
Ammonia-N	0.7 % / 0.7 %	NA	NA
Nitrate-N	trace	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

☐ Class A Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

7/6/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Temecula Valley RWRF

April through June, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	5 / 7	41	75
Cadmium	. 2 / 2	39	85
Copper	315 / 320	1,500	4,300
Lead	14 / 15	300	840
Mercury	<3 / <3	17	57
Molybdenum	13 / 17	NA	75
Nickel	17 / 18	420	420
Selenium	16 / 22	100	100
Zinc	380 / 410	2,800	7,500
TKN	6 % / 6 %	NA	NA
Ammonia-N	0.8 % / 0.8 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

☐ Class A Alternative_____ ■ Class B Alternative Fecal Coliform testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext. 4235
Area Code and Telephone Number

A. J. Pack
Signature

7/6/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

EASTERN MUNICIPAL WATER DISTRICT

October 30, 2000

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Gray:

Attached please find the certification statements for the third quarter (July through September, 2000) for Hemet/San Jacinto, Temecula Valley and Moreno Valley RWRFs.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or Gary Ethridge at ext. 6241.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Administration and Operations

cc: Mike Luker, Director of Water Reclamation
Gary Ethridge, Director of Environmental & Regulatory Compliance

J:\WORDPROC\WP\SSHARED\SLUDGE1.WPD

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570

SLUDGE CERTIFICATION FORM - Hemet/San Jacinto RWRF for July through September, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	<4 / <4	41	75
Cadmium	2 / 2	39	85
Copper	677 / 720	1,500	4,300
Lead	26 / 34	300	840
Mercury	3 / 4	17	57
Molybdenum	14 / 15	NA	75
Nickel	21 / 31	420	420
Selenium	8 / 9	100	100
Zinc	997 / 1100	2,800	7,500
TKN	7.3 % / 9.3 %	NA	NA
Ammonia-N	0.7 % / 0.9 %	NA	NA
Nitrate-N	trace	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ❑ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

❑ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

11/3/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Moreno Valley RWRF
July through September, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	3 / 4	41	75
Cadmium	1 / 1	39	85
Copper	360 / 380	1,500	4,300
Lead	10 / 13	300	840
Mercury	4 / 4	17	57
Molybdenum	7 / 7	NA	75
Nickel	27 / 31	420	420
Selenium	5 / 5	100	100
Zinc	406 / 460	2,800	7,500
TKN	6.7 % / 7.3 %	NA	NA
Ammonia-N	0.7 % / 0.7 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ❑ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

❑ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

11/3/00
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Temecula Valley RWRF
July through September, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	3 / 4	41	75
Cadmium	1 / 1	39	85
Copper	670 / 710	1,500	4,300
Lead	8 / 9	300	840
Mercury	3 / 3	17	57
Molybdenum	25 / 27	NA	75
Nickel	26 / 37	420	420
Selenium	27 / 29	100	100
Zinc	630 / 680	2,800	7,500
TKN	6.3 % / 6.3 %	NA	NA
Ammonia-N	0.8 % / 1.0 %	NA	NA
Nitrate-N	non-detect	NA	NA
Nitrite-N	trace	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ❑ Class B Alternative Fecal Coliform testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

❑ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

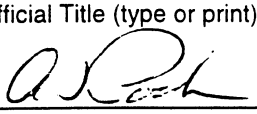
❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext. 4235
Area Code and Telephone Number


Signature

11/3/00
Date Signed

J WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

EASTERN MUNICIPAL WATER DISTRICT

January 9, 2001

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Gray:

Attached please find the certification statements for the forth quarter (October through December, 2000) for Hemet/San Jacinto, Temecula Valley and Moreno Valley RWRFs.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or David Morycz, ext. 6325.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Administration and Operations

cc: Mike Luker, Director of Water Reclamation
David Morycz, Manager of Regulatory Compliance
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WP\SSHARED\SLUDGE1.WPD

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570 Internet: www.emwd.org

SLUDGE CERTIFICATION FORM - Hemet/San Jacinto RWRF for October through Novemeber, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	18 / 25	41	75
Cadmium	2 / 2	39	85
Copper	690 / 700	1,500	4,300
Lead	17 / 18	300	840
Mercury	3 / 3	17	57
Molybdenum	13 / 14	NA	75
Nickel	34 / 34	420	420
Selenium	14 / 16	100	100
Zinc	925 / 950	2,800	7,500
TKN	5.6 % / 5.6 %	NA	NA
Ammonia-N	0.7 % / 0.7 %	NA	NA
Nitrate-N	trace	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

1/11/01
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Temecula Valley RWRF

October through December, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	10 / 15	41	75
Cadmium	1 / 1	39	85
Copper	640 / 650	1,500	4,300
Lead	36 / 64	300	840
Mercury	3 / 3	17	57
Molybdenum	22 / 22	NA	75
Nickel	34 / 36	420	420
Selenium	21 / 22	100	100
Zinc	550 / 550	2,800	7,500
TKN	6 % / 6 %	NA	NA
Ammonia-N	0.8 % / 0.8 %	NA	NA
Nitrate-N	trace	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

❑ Class A Alternative_____ ■ Class B Alternative Fecal Coliform testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ❑ Option 2 ❑ Option 3 ❑ Option 4

❑ Option 5 ❑ Option 6 ❑ Option 7 ❑ Option 8

❑ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext. 4235
Area Code and Telephone Number

Signature

1/11/01
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

SLUDGE CERTIFICATION FORM - Moreno Valley RWRF
October through December, 2000

[This form is intended to assist the Generator with bulk biosolids notification requirements in 503.12(f).]

A. POLLUTANT CONCENTRATIONS (Highlight results that exceed associated limit)

Pollutant	Concentration (mg/kg dry weight) monthly average/ instantaneous value (max)	Part 503 Table 3 Pollutant Concentration (mg/kg dry weight) monthly average	Part 503 Table 1* Ceiling Concentration (mg/kg dry weight) instantaneous maximum
Arsenic	16 / 21	41	75
Cadmium	1.5 / 1.9	39	85
Copper	370 / 380	1,500	4,300
Lead	12 / 14	300	840
Mercury	3 / 3	17	57
Molybdenum	6 / 6	NA	75
Nickel	37 / 41	420	420
Selenium	6 / 7	100	100
Zinc	360 / 410	2,800	7,500
TKN	6.6 % / 6.6 %	NA	NA
Ammonia-N	0.9 % / 0.9 %	NA	NA
Nitrate-N	trace	NA	NA
Nitrite-N	non-detect	NA	NA

*** Biosolids cannot be land applied if any pollutant concentrations in any sample exceed these values.**

B. PATHOGEN REDUCTION (Indicate level achieved and alternative used to achieve that level; attach applicable supporting data.)

☐ Class A · Alternative_____ ■ Class B Alternative Fecal Coliform Testing

C. VECTOR ATTRACTION REDUCTION (Indicate option performed; attach applicable supporting data.)

■ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector Attraction Reduction Options were performed

D. CERTIFICATION

"I certify under penalty of law that the pathogen reduction requirements and the vector attraction reduction requirements have been met as shown in B and C above. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen reduction requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Anthony J. Pack
Name and Official Title (type or print)

(909) 928-3777, ext.4235
Area Code and Telephone Number

Signature

1/11/01
Date Signed

J:\WORDPROC\WP\ENVIRON\BRIGGS\SLDGCERT.FRM

HSJ-RWRF

			Reported	Units
01/19/2000	E00011907-01	Geomean	610000	MPN/gTS
03/15/2000	E00031507-01	Geomean	440000	MPN/gTS
05/24/2000	E00052408-01	Geomean	240000	MPN/gTS
07/19/2000	E00071909-01	Geomean	85000	MPN/gTS
09/20/2000	E00092007-01	Geomean	320000	MPN/gTS
11/16/2000	E00111608-01	Geomean	140000	MPN/gTS

MV-RWRF

			Reported	Units
01/19/2000	E00011907-02	Geomean	90000	MPN/gTS
03/15/2000	E00031507-02	Geomean	130000	MPN/gTS
05/24/2000	E00052408-02	Geomean	180000	MPN/gTS
07/19/2000	E00071909-02	Geomean	74000	MPN/gTS
09/20/2000	E00092007-02	Geomean	78000	MPN/gTS
11/16/2000	E00111608-02	Geomean	81000	MPN/gTS

TV-RWRF

			Reported	Units
02/16/2000	E00021609-03	Geomean	88000	MPN/gTS
05/24/2000	E00052408-03	Geomean	67000	MPN/gTS
07/19/2000	E00071909-03	Geomean	130000	MPN/gTS
09/20/2000	E00092007-03	Geomean	110000	MPN/gTS
11/16/2000	E00111608-03	Geomean	49000	MPN/gTS

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
HSJ-503

			Reported	Units
01/10/2000	HSJ-CAKE DAY 1	Fecal Coliform	28000	MPN/gTS
01/11/2000	HSJ-CAKE DAY 2	Fecal Coliform	910000	MPN/gTS
01/12/2000	HSJ-CAKE DAY 3	Fecal Coliform	1300000	MPN/gTS
01/13/2000	HSJ-CAKE DAY 4	Fecal Coliform	1300000	MPN/gTS
01/17/2000	HSJ-CAKE DAY 5	Fecal Coliform	1500000	MPN/gTS
01/18/2000	HSJ-CAKE DAY 6	Fecal Coliform	710000	MPN/gTS
01/19/2000	HSJ-CAKE DAY 7	Fecal Coliform	700000	MPN/gTS
		Geomean	610000	MPN/gTS
03/06/2000	HSJ-CAKE DAY 1	Fecal Coliform	150000	MPN/gTS
03/07/2000	HSJ-CAKE DAY 2	Fecal Coliform	550000	MPN/gTS
03/08/2000	HSJ-CAKE DAY 3	Fecal Coliform	140000	MPN/gTS
03/09/2000	HSJ-CAKE DAY 4	Fecal Coliform	1200000	MPN/gTS
03/13/2000	HSJ-CAKE DAY 5	Fecal Coliform	710000	MPN/gTS
03/14/2000	HSJ-CAKE DAY 6	Fecal Coliform	540000	MPN/gTS
03/15/2000	HSJ-CAKE DAY 7	Fecal Coliform	570000	MPN/gTS
		Geomean	440000	MPN/gTS
05/15/2000	HSJ-CAKE DAY 1	Fecal Coliform	61000	MPN/gTS
05/16/2000	HSJ-CAKE DAY 2	Fecal Coliform	1400000	MPN/gTS
05/17/2000	HSJ-CAKE DAY 3	Fecal Coliform	280000	MPN/gTS
05/18/2000	HSJ-CAKE DAY 4	Fecal Coliform	380000	MPN/gTS
05/22/2000	HSJ-CAKE DAY 5	Fecal Coliform	380000	MPN/gTS
05/23/2000	HSJ-CAKE DAY 6	Fecal Coliform	98000	MPN/gTS
05/24/2000	HSJ-CAKE DAY 7	Fecal Coliform	120000	MPN/gTS
		Geomean	240000	MPN/gTS
07/10/2000	HSJ-CAKE DAY 1	Fecal Coliform	47000	MPN/gTS
07/11/2000	HSJ-CAKE DAY 2	Fecal Coliform	68000	MPN/gTS
07/12/2000	HSJ-CAKE DAY 3	Fecal Coliform	87000	MPN/gTS
07/13/2000	HSJ-CAKE DAY 4	Fecal Coliform	23000	MPN/gTS
07/17/2000	HSJ-CAKE DAY 5	Fecal Coliform	240000	MPN/gTS
07/18/2000	HSJ-CAKE DAY 6	Fecal Coliform	180000	MPN/gTS
07/19/2000	HSJ-CAKE DAY 7	Fecal Coliform	110000	MPN/gTS
		Geomean	85000	MPN/gTS
09/11/2000	HSJ-CAKE DAY 1	Fecal Coliform	290000	MPN/gTS
09/12/2000	HSJ-CAKE DAY 2	Fecal Coliform	310000	MPN/gTS
09/13/2000	HSJ-CAKE DAY 3	Fecal Coliform	980000	MPN/gTS
09/14/2000	HSJ-CAKE DAY 4	Fecal Coliform	790000	MPN/gTS
09/18/2000	HSJ-CAKE DAY 5	Fecal Coliform	170000	MPN/gTS
09/19/2000	HSJ-CAKE DAY 6	Fecal Coliform	310000	MPN/gTS
09/20/2000	HSJ-CAKE DAY 7	Fecal Coliform	87000	MPN/gTS
		Geomean	320000	MPN/gTS
11/06/2000	HSJ-CAKE DAY 1	Fecal Coliform	250000	MPN/gTS
11/07/2000	HSJ-CAKE DAY 2	Fecal Coliform	44000	MPN/gTS
11/08/2000	HSJ-CAKE DAY 3	Fecal Coliform	160000	MPN/gTS
11/13/2000	HSJ-CAKE DAY 4	Fecal Coliform	120000	MPN/gTS
11/14/2000	HSJ-CAKE DAY 5	Fecal Coliform	190000	MPN/gTS
11/15/2000	HSJ-CAKE DAY 6	Fecal Coliform	160000	MPN/gTS
11/16/2000	HSJ-CAKE DAY 7	Fecal Coliform	180000	MPN/gTS
		Geomean	140000	MPN/gTS

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
MV-503

			Reported	Units
01/10/2000	MV-CAKE DAY 1	Fecal Coliform	130000	MPN/gTS
01/11/2000	MV-CAKE DAY 2	Fecal Coliform	80000	MPN/gTS
01/12/2000	MV-CAKE DAY 3	Fecal Coliform	100000	MPN/gTS
01/13/2000	MV-CAKE DAY 4	Fecal Coliform	42000	MPN/gTS
01/17/2000	MV-CAKE DAY 5	Fecal Coliform	140000	MPN/gTS
01/18/2000	MV-CAKE DAY 6	Fecal Coliform	50000	MPN/gTS
01/19/2000	MV-CAKE DAY 7	Fecal Coliform	160000	MPN/gTS
		Geomean	90000	MPN/gTS
03/06/2000	MV-CAKE DAY 1	Fecal Coliform	150000	MPN/gTS
03/07/2000	MV-CAKE DAY 2	Fecal Coliform	98000	MPN/gTS
03/08/2000	MV-CAKE DAY 3	Fecal Coliform	140000	MPN/gTS
03/09/2000	MV-CAKE DAY 4	Fecal Coliform	500000	MPN/gTS
03/13/2000	MV-CAKE DAY 5	Fecal Coliform	33000	MPN/gTS
03/14/2000	MV-CAKE DAY 6	Fecal Coliform	200000	MPN/gTS
03/15/2000	MV-CAKE DAY 7	Fecal Coliform	83000	MPN/gTS
		Geomean	130000	MPN/gTS
05/15/2000	MV-CAKE DAY 1	Fecal Coliform	73000	MPN/gTS
05/16/2000	MV-CAKE DAY 2	Fecal Coliform	200000	MPN/gTS
05/17/2000	MV-CAKE DAY 3	Fecal Coliform	310000	MPN/gTS
05/18/2000	MV-CAKE DAY 4	Fecal Coliform	380000	MPN/gTS
)5/22/2000	MV-CAKE DAY 5	Fecal Coliform	310000	MPN/gTS
05/23/2000	MV-CAKE DAY 6	Fecal Coliform	92000	MPN/gTS
05/24/2000	MV-CAKE DAY 7	Fecal Coliform	120000	MPN/gTS
		Geomean	180000	MPN/gTS
07/11/2000	MV-CAKE DAY 1	Fecal Coliform	78000	MPN/gTS
07/12/2000	MV-CAKE DAY 2	Fecal Coliform	110000	MPN/gTS
07/13/2000	MV-CAKE DAY 3	Fecal Coliform	81000	MPN/gTS
07/14/2000	MV-CAKE DAY 4	Fecal Coliform	92000	MPN/gTS
07/17/2000	MV-CAKE DAY 5	Fecal Coliform	49000	MPN/gTS
07/18/2000	MV-CAKE DAY 6	Fecal Coliform	85000	MPN/gTS
07/19/2000	MV-CAKE DAY 7	Fecal Coliform	45000	MPN/gTS
		Geomean	74000	MPN/gTS
09/11/2000	MV-CAKE DAY 1	Fecal Coliform	86000	MPN/gTS
09/12/2000	MV-CAKE DAY 2	Fecal Coliform	34000	MPN/gTS
09/13/2000	MV-CAKE DAY 3	Fecal Coliform	46000	MPN/gTS
09/14/2000	MV-CAKE DAY 4	Fecal Coliform	87000	MPN/gTS
09/18/2000	MV-CAKE DAY 5	Fecal Coliform	100000	MPN/gTS
09/19/2000	MV-CAKE DAY 6	Fecal Coliform	110000	MPN/gTS
09/20/2000	MV-CAKE DAY 7	Fecal Coliform	140000	MPN/gTS
		Geomean	78000	MPN/gTS
11/06/2000	MV-CAKE DAY 1	Fecal Coliform	520000	MPN/gTS
11/07/2000	MV-CAKE DAY 2	Fecal Coliform	51000	MPN/gTS
11/08/2000	MV-CAKE DAY 3	Fecal Coliform	66000	MPN/gTS
1/13/2000	MV-CAKE DAY 4	Fecal Coliform	29000	MPN/gTS
11/14/2000	MV-CAKE DAY 5	Fecal Coliform	69000	MPN/gTS
11/15/2000	MV-CAKE DAY 6	Fecal Coliform	21000	MPN/gTS
11/16/2000	MV-CAKE DAY 7	Fecal Coliform	310000	MPN/gTS
		Geomean	81000	MPN/gTS

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
TV-503

			Reported	Units
02/07/2000	TV-CAKE DAY 1	Fecal Coliform	80000	MPN/gTS
02/08/2000	TV-CAKE DAY 2	Fecal Coliform	300000	MPN/gTS
02/09/2000	TV-CAKE DAY 3	Fecal Coliform	180000	MPN/gTS
02/10/2000	TV-CAKE DAY 4	Fecal Coliform	51000	MPN/gTS
02/14/2000	TV-CAKE DAY 5	Fecal Coliform	30000	MPN/gTS
02/15/2000	TV-CAKE DAY 6	Fecal Coliform	96000	MPN/gTS
02/16/2000	TV-CAKE DAY 7	Fecal Coliform	67000	MPN/gTS
		Geomean	88000	MPN/gTS
05/15/2000	TV-CAKE DAY 1	Fecal Coliform	46000	MPN/gTS
05/16/2000	TV-CAKE DAY 2	Fecal Coliform	130000	MPN/gTS
05/17/2000	TV-CAKE DAY 3	Fecal Coliform	180000	MPN/gTS
05/18/2000	TV-CAKE DAY 4	Fecal Coliform	28000	MPN/gTS
05/22/2000	TV-CAKE DAY 5	Fecal Coliform	130000	MPN/gTS
05/23/2000	TV-CAKE DAY 6	Fecal Coliform	29000	MPN/gTS
05/24/2000	TV-CAKE DAY 7	Fecal Coliform	55000	MPN/gTS
		Geomean	67000	MPN/gTS
07/10/2000	TV-CAKE DAY 1	Fecal Coliform	130000	MPN/gTS
07/11/2000	TV-CAKE DAY 2	Fecal Coliform	44000	MPN/gTS
07/12/2000	TV-CAKE DAY 3	Fecal Coliform	120000	MPN/gTS
07/13/2000	TV-CAKE DAY 4	Fecal Coliform	120000	MPN/gTS
07/17/2000	TV-CAKE DAY 5	Fecal Coliform	320000	MPN/gTS
07/18/2000	TV-CAKE DAY 6	Fecal Coliform	130000	MPN/gTS
07/19/2000	TV-CAKE DAY 7	Fecal Coliform	180000	MPN/gTS
		Geomean	130000	MPN/gTS
09/11/2000	TV-CAKE DAY 1	Fecal Coliform	130000	MPN/gTS
09/12/2000	TV-CAKE DAY 2	Fecal Coliform	140000	MPN/gTS
09/13/2000	TV-CAKE DAY 3	Fecal Coliform	140000	MPN/gTS
09/14/2000	TV-CAKE DAY 4	Fecal Coliform	98000	MPN/gTS
09/18/2000	TV-CAKE DAY 5	Fecal Coliform	140000	MPN/gTS
09/19/2000	TV-CAKE DAY 6	Fecal Coliform	140000	MPN/gTS
09/20/2000	TV-CAKE DAY 7	Fecal Coliform	47000	MPN/gTS
		Geomean	110000	MPN/gTS
11/06/2000	TV-CAKE DAY 1	Fecal Coliform	76000	MPN/gTS
11/07/2000	TV-CAKE DAY 2	Fecal Coliform	73000	MPN/gTS
11/08/2000	TV-CAKE DAY 3	Fecal Coliform	66000	MPN/gTS
11/13/2000	TV-CAKE DAY 4	Fecal Coliform	75000	MPN/gTS
11/14/2000	TV-CAKE DAY 5	Fecal Coliform	27000	MPN/gTS
11/15/2000	TV-CAKE DAY 6	Fecal Coliform	46000	MPN/gTS
11/16/2000	TV-CAKE DAY 7	Fecal Coliform	21000	MPN/gTS
		Geomean	49000	MPN/gTS

Eastern Municipal Water District
503 Sludge Monitoring

PVPPSE-503
PV-503

			Reported	Units
12/01/2000	PVPPSE503-1	Fecal Coliform	>18000	MPN/gTS
	PVPPSE503-2	Fecal Coliform	>18000	MPN/gTS

VECTOR/ATTRACTION

REDUCTION DATA

FOR

CALENDAR YEAR

2000

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 09:53 AM

				Hemet-San Jacinto RWRF
				Results
	VOL SOL % REDUCTION	01/05/00	%	47
		01/13/00	%	41
		01/17/00	%	48
		01/24/00	%	44
		01/27/00	%	35
		01/31/00	%	52
		02/03/00	%	37
		02/07/00	%	52
		02/10/00	%	52
		02/14/00	%	44
		03/02/00	%	42
		03/06/00	%	49
		03/15/00	%	60
		03/16/00	%	50
		03/20/00	%	54
		04/17/00	%	35
		04/20/00	%	52
		04/24/00	%	61
		04/27/00	%	56
		05/01/00	%	52
		05/08/00	%	50
		05/11/00	%	44
		05/15/00	%	41
		05/22/00	%	58
		05/29/00	%	57
		06/01/00	%	48
		06/06/00	%	54
		06/08/00	%	54
		06/12/00	%	58
		06/15/00	%	54
		06/19/00	%	64
		06/22/00	%	56
		06/25/00	%	54
		07/03/00	%	56
		07/06/00	%	57
		07/08/00	%	73
		07/13/00	%	41
		07/18/00	%	54
		07/24/00	%	51
		08/07/00	%	56
		08/10/00	%	66

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 09:53 AM

		Hemet-San Jacinto RWRF
		Results
08/14/00	%	59
08/21/00	%	57
08/24/00	%	54
08/28/00	%	56
08/31/00	%	59
09/04/00	%	54
09/07/00	%	57
09/11/00	%	56
09/14/00	%	51
09/18/00	%	49
09/21/00	%	54
09/25/00	%	57
09/28/00	%	49
10/01/00	%	55
10/05/00	%	49
10/09/00	%	44
10/12/00	%	56
10/16/00	%	43
10/19/00	%	44
10/23/00	%	47
10/26/00	%	52
10/30/00	%	46
11/02/00	%	54
11/06/00	%	59
11/09/00	%	54
11/20/00	%	56
11/27/00	%	55
11/30/00	%	48
12/04/00	%	100
12/11/00	%	56
12/18/00	%	54
12/21/00	%	48
12/25/00	%	100
Average		**54**
Maximum		100
Minimum		35

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

					Moreno Valley RWRF
					Results
	% Vol Reduce	01/13/00			38
		01/27/00			43
		02/07/00			7
		02/14/00			21
		02/28/00			30
		03/02/00			45
		03/06/00			38
		03/13/00			44
		03/16/00			40
		03/23/00			47
		04/03/00			45
		04/06/00			39
		04/10/00			45
		05/01/00			55
		05/08/00			43
		05/11/00			49
		05/22/00			47
		06/01/00			44
		06/19/00			43
		07/06/00			36
		07/17/00			42
		07/20/00			34
		07/24/00			41
		07/27/00			44
		07/31/00			38
		08/07/00			52
		08/10/00			42
		08/14/00			43
		08/17/00			39
		08/21/00			45
		08/24/00			55
		08/28/00			43
		09/18/00			67
		09/21/00			50
		09/25/00			41
		09/28/00			39
		10/02/00			29
		10/05/00			41
		10/09/00			36
		10/12/00			51
		10/19/00			27

Source Control from MACS Sludgehsj.bqy

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

			Moreno Valley RWRF
			Results
10/23/00			42
10/26/00			44
10/30/00			38
11/02/00			49
11/06/00			48
11/09/00			54
11/16/00			55
11/20/00			36
11/27/00			55
11/30/00			41
12/04/00			54
12/07/00			38
12/11/00			31
12/14/00			18
12/18/00			27
12/28/00			39
Average			41
Maximum			67
Minimum			7

Source Control from MACS Sludgehsj.bqy

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

			Temecula Valley RWRF
			Biosolids
			Results
	% VOL REDUCTION	01/01/00	58
		01/02/00	58
		01/03/00	53
		01/05/00	59
		01/06/00	56
		01/07/00	55
		01/08/00	55
		01/09/00	53
		01/10/00	57
		01/11/00	57
		01/12/00	53
		01/13/00	57
		01/14/00	58
		01/15/00	56
		01/16/00	56
		01/17/00	52
		01/18/00	45
		01/19/00	60
		01/20/00	60
		01/21/00	51
		01/22/00	49
		01/23/00	46
		01/24/00	52
		01/25/00	52
		01/26/00	42
		01/27/00	55
		01/28/00	42
		01/29/00	28
		01/31/00	50
		02/01/00	52
		02/02/00	48
		02/03/00	60
		02/04/00	58
		02/05/00	58
		02/06/00	58
		02/07/00	54
		02/08/00	53
		02/09/00	57
		02/10/00	56
		02/11/00	56
		02/12/00	56

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
02/13/00	56
02/14/00	58
02/15/00	54
02/16/00	56
02/17/00	52
02/18/00	53
02/19/00	57
02/20/00	53
02/25/00	34
02/26/00	40
02/27/00	42
02/28/00	50
02/29/00	82
03/01/00	81
03/02/00	68
03/03/00	67
03/04/00	79
03/05/00	84
03/06/00	71
03/07/00	23
03/08/00	23
03/09/00	35
03/10/00	62
03/11/00	62
03/12/00	62
03/13/00	65
03/14/00	67
03/15/00	78
03/16/00	75
03/17/00	69
03/18/00	68
03/19/00	67
03/20/00	53
03/21/00	76
03/22/00	72
03/23/00	71
03/24/00	79
03/25/00	79
03/26/00	79
03/27/00	68
03/28/00	68

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
03/29/00	65
03/30/00	70
03/31/00	69
04/01/00	68
04/02/00	64
04/03/00	60
04/04/00	65
04/05/00	66
04/06/00	62
04/07/00	56
04/08/00	60
04/09/00	60
04/10/00	63
04/11/00	70
04/12/00	67
04/13/00	65
04/14/00	63
04/15/00	63
04/16/00	63
04/17/00	71
04/18/00	64
04/19/00	63
04/20/00	60
04/21/00	57
04/22/00	64
04/23/00	57
04/24/00	51
04/25/00	60
04/26/00	63
04/27/00	58
04/28/00	62
04/29/00	60
04/30/00	60
05/01/00	63
05/02/00	55
05/03/00	57
05/04/00	57
05/06/00	63
05/07/00	65
05/08/00	61
05/09/00	65

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
05/10/00	65
05/11/00	50
05/12/00	44
05/13/00	44
05/14/00	44
05/15/00	39
05/16/00	54
05/17/00	56
05/18/00	56
05/19/00	52
05/20/00	54
05/21/00	58
05/22/00	49
05/23/00	58
05/24/00	54
05/25/00	58
05/26/00	56
05/27/00	58
05/28/00	56
05/29/00	61
05/30/00	80
05/31/00	78
06/01/00	61
06/02/00	59
06/03/00	59
06/04/00	57
06/05/00	57
06/06/00	55
06/07/00	59
06/08/00	53
06/09/00	61
06/10/00	51
06/11/00	56
06/12/00	57
06/13/00	60
06/14/00	51
06/15/00	56
06/16/00	52
06/17/00	58
06/18/00	56
06/19/00	56

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
06/20/00	56
06/21/00	58
06/22/00	58
06/23/00	60
06/24/00	60
06/25/00	58
06/26/00	51
06/27/00	59
06/29/00	63
06/30/00	59
07/01/00	39
07/02/00	54
07/03/00	52
07/04/00	35
07/05/00	56
07/06/00	57
07/07/00	54
07/08/00	54
07/09/00	47
07/10/00	62
07/11/00	49
07/12/00	56
07/13/00	58
07/14/00	53
07/15/00	51
07/16/00	51
07/17/00	49
07/18/00	37
07/19/00	37
07/20/00	41
07/21/00	41
07/22/00	37
07/23/00	31
07/24/00	34
07/25/00	54
07/26/00	47
07/27/00	52
07/28/00	57
07/29/00	63
07/30/00	61
07/31/00	54

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
08/01/00	52
08/02/00	38
08/03/00	46
08/04/00	35
08/05/00	41
08/06/00	41
08/07/00	53
08/08/00	44
08/09/00	44
08/10/00	49
08/11/00	45
08/12/00	48
08/13/00	45
08/14/00	40
08/15/00	57
08/16/00	53
08/17/00	55
08/18/00	57
08/19/00	57
08/20/00	53
08/21/00	45
08/22/00	50
08/23/00	50
08/24/00	48
08/25/00	45
08/26/00	56
08/27/00	37
08/28/00	47
08/29/00	45
08/30/00	40
08/31/00	43
09/01/00	40
09/02/00	50
09/03/00	50
09/04/00	50
09/05/00	45
09/06/00	44
09/07/00	46
09/08/00	60
09/09/00	66
09/10/00	64

Source Control from MACS

Eastern Municipal Water District
Annual Sludge Report
01-19-2001 10:00 AM

	Temecula Valley RWRF
	Biosolids
	Results
09/11/00	49
09/12/00	56
09/13/00	58
09/14/00	48
09/15/00	45
09/16/00	48
09/17/00	49
09/18/00	54
09/19/00	59
09/20/00	51
09/21/00	48
09/22/00	21
09/23/00	36
09/24/00	30
09/25/00	39
09/26/00	46
09/27/00	46
09/28/00	44
09/29/00	53
09/30/00	51
10/03/00	52
10/10/00	51
10/17/00	46
10/24/00	60
10/31/00	53
11/07/00	44
11/14/00	44
11/21/00	50
11/28/00	48
12/05/00	61
12/12/00	54
12/19/00	54
12/26/00	71
Average	55
Maximum	84
Minimum	21

Source Control from MACS

Nutrient Data

for

Calendar Year

2000

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
HSJ-503

		Ammonia as N	Nitrate as N	Nitrite as N	Potassium	TKN	Total Nitrogen	TP
		mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported	Reported
01/10/2000	E00011013-01	6530	<1.	0.66	2400	60000	60200	28000
03/06/2000	E00030610-01	5900	<1.	1.6	2800	54200	54200	20700
05/15/2000	E00051511-01	7100	6.1	1.7	2700	61800	61800	30300
07/10/2000	E00071009-01	9350		0.96	2400	93500	93500	31800
09/11/2000	E00091111-01	5550	<1.	<0.06	2400	52400	52000	32600
11/06/2000	E00110610-01	7000	4.6	<0.01	3000	56000	56100	25000

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
MV-503

		Ammonia as N	Nitrate as N	Nitrite as N	Potassium	TKN	Total Nitrogen	TP
		mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported	Reported
01/10/2000	E00011014-01	6570	40	3.0	2400	73000	72600	24000
03/06/2000	E00030608-01	8700	<1.	2.0	2700	66800	66800	22900
05/15/2000	E00051512-01	8200	<1.	3.7	2100	66800	66800	28700
07/11/2000	E00071114-01	6400	21.	0.93	4000	73300	733000	28400
09/11/2000	E00091112-01	7340	<1.	<0.07	2500	60800	61000	29900
11/06/2000	E00110709-01	8600	4.4	<0.1	3000	66000	66600	28000

Eastern Municipal Water District
503 Sludge Monitoring

BP-CAKE
TV-503

		Ammonia as N	Nitrate as N	Nitrite as N	Potassium	TKN	Total Nitrogen	TP
		mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported	Reported
02/07/2000	E00020712-01	7770	<1.	2.	1600		68000	22000
05/15/2000	E00051513-01	7600	<1.	1.9	2400	59000	59000	22300
07/10/2000	E00071010-01	9800		0.31	2100	62900	62900	24300
09/11/2000	E00091113-01	7190	<1.	0.42	2600	63600	64000	26700
11/06/2000	E00110611-01	8100	5.0	<0.01	2500	60000	60000	22000

Eastern Municipal Water District
503 Sludge Monitoring

PVPPMIX-503
PV-503

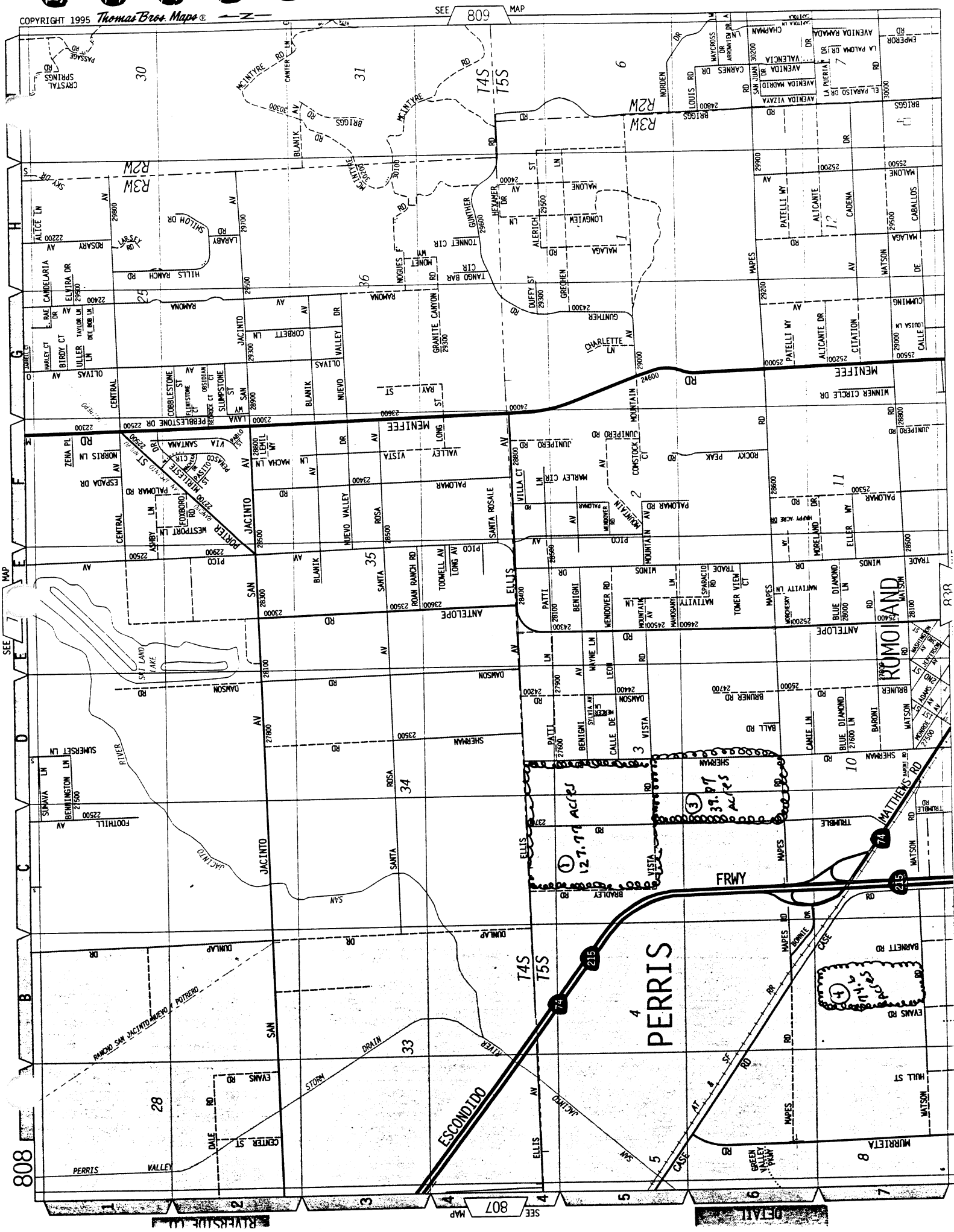
		Ammonia as N	Nitrate as N	Nitrite as N	Potassium	TKN	Total Nitrogen	TP
		mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported	Reported
03/22/2000	E00032210-03	11000	5.	<10	5700	65000		39000
04/12/2000	E00041209-05	2400	7.	3100	4400	57000		36000
06/09/2000	E00060906-03	1600	<2.	<1.	8600	63000		35000
06/26/2000	E00062610-03	1000	<2.	<1.	5000	64000	64000	41000
07/21/2000	E00072106-05	11400	17.	0.91	3600	64500	64485.	34400
08/18/2000	E00081807-02				4500.			
10/02/2000	E00100219-08				7800			
10/13/2000	E00101307-05				3500			
11/07/2000	E00110719-03				5700			
12/18/2000	E00121910-05				3100			
12/26/2000	E00122615-02					62000		
12/26/2000	E00122615-03					63000		

Class A Biosolids Data

for

Calendar Year

2000


COPYRIGHT 1995 Thomas Bros. Maps®
SEE 809 MAP
SEE 807 MAP
808
RIVERSIDE CO.
DETAIL
PERRIS
ESCONDIDO
FRWY
MATTHEWS RD
MENIFEE
ROMOLAND
ANTELOPE RD
JACINTO
RAMONA EXPY
MAPES RD
EVANS RD
CASE RD
MURRIETA
RAMONA SAN JACINTO NUEVO Y POTRERO
SAN JACINTO RIVER
PERRIS VALLEY STORM DRAIN
SAN JACINTO RIVER
SALT LAKE
1 127.77 Acres
2 39.87 Acres
3 39.87 Acres
4 74.42 Acres
T4S
T5S
R3W
R2W

EASTERN MUNICIPAL WATER DISTRICT

Date: January 25, 2001

To: Anne Briggs
Regulatory Compliance

From: John Jannone
PVRWRF

Subject: Land Application of Sludge January 3, 4, 5 2001 **(PVSA5JAN01)**

Sanchez Hauling loaded, transported, and spread 656.6 tons of dried pasteurized and unpasteurized Class A sludge produced at the PVRWRF from January 2000 through November 2000. There is again a discrepancy between the amount of sludge hauled (656.6 tons) verses the theoretical amount produced (692.1). All dried sludge was applied to 74.6acres (Township/Range/Section T.5S.R.3) located at the west side of the PVRWRF.

As shown on the following page, 4147 wet tons of pasteurized sludge was applied to the asphalt drying bed from August through November 2000 and 478 tons of unpasteurized sludge was applied to the dirt drying beds from March through September 2000. All of these sludges were subsequently dried to 91.5% solids and removed by Sanchez Hauling January 3, 4, 5, 2001. We did not keep records on wet tons applied to each individual dirt drying bed which may cause some deviation in the numbers shown due to the fact that dirt drying bed #9(DDB9) sludge did not pass Class A Salmonella requirements and was not land applied. We are implementing additional record keeping beginning in 2001 which will track the amount of wet tons applied to each dirt drying bed. All sludge applied met Class A requirements and was applied at a rate of 8.8 tons per acre based on the hauling tickets and 9.5 tons per acre based on calculated tonnage removed. Pedro Indacochea will farm wheat, oats, and at least one alfalfa crop during this coming year. Application rate is based on alfalfa and 30% mineralization.

Attached you will find:

* Salmonella test results
* Percent solids and metals testing results
* Background nitrogen testing for the 74.6 acre parcel
* Application rate calculation
* Sanchez Hauling Load tickets
* PVRWRF sludge production record for the year 2000

Let me know if you have any questions or concerns.

cc: Mike Luker

January 25, 2000 Sludge Rate application Calculation 48 Acres

Sludge Application Rate Calculation for 74.5 acres (Township/Range/Section is T.5S.R.3) located at the western portion of the PVRWRF site is as follows:

Background nitrate for samples taken on 11-7-00 averaged 25.4 mg/kgDry

Nitrate numbers are being used for calculation per determination that ammonia is not in usable form.

The farmer, Pedro Indacochea, will grow wheat, oats and alfalfa during the next calender year. According to the Western Fertilizer Handbook eighth edition(page 98), the application rate for Nitrogen is 480 lbs N per acre.

Background Nitrogen Calculation:

25.5mg/KG x 0.00135 tons soil/acre-ft x 0.5ft(application soil depth) x 2000lb/ton =

34.5lbN/acre

Can apply 480lbN/acre - 34.5lbN/acre = 445.5 lbN/acre

Nitrogen background of sludge to be applied is 6.25%

0.0625N x 2000lb/ton = 125 lbN/ton

Mineralization Rate Calculation:

125lbN/ton x 0.915% solids x 0.3(mineralization rate) = 34.3lbN/ton

445.5 lbN/acre / 34.31 lbN/ton = 12.98 tons sludge/acre

Can apply at a rate not to exceed 9.5 tons per acre so maximum amount to be applied is:

74.5 acres x 9.5 tons/acre = **707.8 tons can be applied**

EASTERN MUNICIPAL WATER DISTRICT

Date: December 22, 2000
To: Anne Briggs
Regulatory Compliance

From: John Jannone
PVRWRF

Subject: Land Application of Sludge August 2000 **(PVSA22DEC00)**

Pasteurized sludge produced at the PVRWRF was solar dried, tested for Class A quality, and then land applied on two local area fields from 8/30/00 through 9/8/00.

All sludge hauled off site was produced and solar dried from 2/12/00 through 7/31/00. The data for each month is as follows:

Month	Wet Tons Applied	Average % Solids Applied Sludge
February	638	17.0
March	453	17.0
April	1092	15.6
May	1376	14.9
June	1449	14.7
July	1163	14.0
Total	6171	Average 15.5%

Six different piles of stockpiled sludge were tested for Salmonella, metals, and % solids. Data sheets for each test are attached. Salmonella results were all 4 MPN/4gm or less. The total percent solids averaged 91.7 from the last samples taken from each pile. Results are attached.

Calculation of dry tons of solids to be removed based on data shown above:

$$6171 \text{ wet tons} \times \frac{15.5\% \text{ solids wet}}{91.7\% \text{ solids dried}} = 1043 \text{ dried tons to be removed}$$

Sanchez Hauling was contracted to land apply dried sludge. They provided weight tickets from which it was determined that each truck, when filled with 7 scoops, had a pay load of 20.27 tons.

55 loads totaling 1114 tons were applied to 127.77 acres and another 101.35 tons were applied to the 39.87 acres of District land per the attached memos. The 71 tons difference is within reason due to use of grab samples for % solids testing and lack of weight tickets for all loads.

cc: Mike Luker

SALMONELLA RESULTS FROM SIX SLUDGE PILES:
PVPP-SW-503, PVPP-SE-503, PVPP-NE-503, PVPP-NW-503, PVPP-ME-503, PVPP-MW-503

PV-RWRF
PV-503

E00032210-02	Mar-22-2000	PVPP-SW-503	PVPPSW-503	Salmonella	<3.	MPN/4gm
E00032210-01	Mar-22-2000	PVPP-SE-503	PVPPSE-503	Salmonella	<3.	MPN/4gm
E00041209-01	Apr-12-2000	PVPP-SW-503	PVPPSW-503	Salmonella	<3.	MPN/4gm
E00041209-04	Apr-12-2000	PVPP-SE-503	PVPPSE-503	Salmonella	4.	MPN/4gm
E00060906-01	Jun-09-2000	PVPP-SE-503	PVPPSE-503	Salmonella	<3.	MPN/4gm
E00060906-02	Jun-09-2000	PVPP-SW-503	PVPPSW-503	Salmonella	<3.	MPN/4gm
E00062610-01	Jun-26-2000	PVPP-NW-503	PVPPNW-503	Salmonella	<3.	MPN/4gm
E00062610-02	Jun-26-2000	PVPP-NE-503	PVPPNE-503	Salmonella	<3.	MPN/4gm
E00072106-01	Jul-21-2000	PVPP-MW-503	PVPPMW-503	Salmonella	<3.	MPN/4gm
E00072106-04	Jul-21-2000	PVPP-ME-503	PVPPME-503	Salmonella	<3.	MPN/4gm
~~E00081807-01~~	~~Aug-18-2000~~	~~PVUP-DDB1-503~~	~~PVUPDDB1-503~~	~~Salmonella~~	~~4.~~	~~MPN/4gm~~
E00081807-04	Aug-18-2000	PVPP-ME-503	PVPPME-503	Salmonella	<3.	MPN/4gm
E00081807-03	Aug-18-2000	PVPP-MW-503	PVPPMW-503	Salmonella	<3.	MPN/4gm

PVPP = Penns Valley Pasteurized Pile
SW, SE etc = southwest, southeast location on drying bed

August 18, 2000 Sludge Rate Application Calculation 39.87 Acres (PV39/87A)

Sludge Application Rate Calculation for 39.87 acres (Township/Range/Section is T.5S.R.3) bordered by Trumble Rd to the west and north, Mapes Rd. to the south, and Sherman Rd. to the East is as follows:

Background nitrogen testing for samples taken on 7/31/00 were:

ID#	NO3-N mg/Kg.	TKN mg/Kg. Dry wt
E00073111-07	3.2	270
E00073111-08	5.1	650
E00073111-09	4.0	330
Total	12.3	1250
Average	4.1	417

Nitrate numbers were used for calculation per determination that Ammonia was not in usable form.

The farmer, Pedro Indacochea, will grow wheat without irrigation. According to the Western Fertilizer Handbook eighth edition(page 97), the application rate for Nitrogen is 175 lbs N per acre. We will be utilizing 100lbs N per acre application rate due to the lack of irrigation and subsequent nitrogen utilization.

Background Nitrogen Calculation:
4.1mg/Kg x 0.00135 tons soil/acre-ft x 0.5ft(application soil depth) x 2000lb/ton = 5.6 lbN/acre

Can apply 100 lbN/acre - 5.6 lb N/acre = 94.4 lb N/acre

Nitrogen background of sludge to be applied is 6.4%

6.4%N x 2000lb/ton = 128lbN/ton

Mineralization Rate calculation:

128lb/ton x 0.92% solids x .3(mineralization rate) = 35.3lbN/ton

94.4lb N/acre / 35.31 lbN/ton =2.67 tons sludge/acre

2.67 tons/acre x 39.87 acres = **106.4 tons sludge can be applied**

Eastern Municipal Water District
Certificate of Analysis
Perris Valley RWRF

Sample Id:	E00073111-07	E00073111-08	E00073111-09
Client Id:	PV39.87 SOUTH	PV39.87 EAST	PV39.87 WEST
Site:	-	-	-
Collect Date:	31-JUL-00	31-JUL-00	31-JUL-00

rameter	Units	Value	Value	Value
Total Kjeldahl Nitrogen	mg/kgDry	270	650	330
Nitrate as N	mg/kgDry	3.2	5.1	4.0
Total Solids	%	99.	99.	99.

Approved By: [signature] 08/07/2000

(4)

August 18, 2000 Sludge Rate Application Calculation 127.77 Acres (PV127.77)

Sludge Application Rate Calculation for 127.77 acres (Township/Range/Section is T.5S.R.3) bordered by Bradley Rd to the West, Ellis Ave. to the north, Sherman Rd. to the East, and Trumble Rd Pond to the south is as follows:

Background nitrogen testing for samples taken on 8/16/00 were:

ID#	NO3-N mg/Kg.	TKN mg/Kg. Dry wt
E00081609-01	2.2	1290
E00081609-02	27.0	460
E00081609-03	6.8	820
Total	36.0	
Average	12.0	

Nitrate numbers were used for calculation per determination that Ammonia was not in usable form.

The farmer, Pedro Indacochea, will grow alfalfa. According to the Western Fertilizer Handbook eighth edition(page 98), the application rate for Nitrogen is 480 lbs N per acre.

Background Nitrogen Calculation:
12mg/Kg x 0.00135 tons soil/acre-ft x 0.5ft(application soil depth) x 2000lb/ton = 16.32lbN/acre

Can apply 480lbN/acre - 16.32lb/ac = 463.68 lb N/acre

Nitrogen background of sludge to be applied is 6.4%

6.4%N x 2000lb/ton = 128lbN/ton

Mineralization Rate calculation:

128lb/ton x 0.92% solids x .3(mineralization rate) = 35.3lbN/ton

463.68lb N/acre / 35.31 lbN/ton = 13.4 tons sludge/acre

13.4 tons/acre x 127.77 acres = 1712 tons sludge can be applied

Application at not more than 9.5 tons/acre will allow a maximum of 1214 tons to be applied on this parcel.

Jannone, John

From: Gierhart, Scott
Sent: Friday, August 18, 2000 8:09 AM
To: Jannone, John
Cc: Javier, Alfred
Subject: Soil results

The following are the nitrate and kjeldahl nitrogen results you requested

Dry wt Sample NO3-N	Lab Number	mg/Kg Dry wt KJ-N	mg/Kg
PV 127.77S 2.2	E00081609-01	1290	
PV 127.77E	E00081609-02	460	27
PV 127.77W 6.8	E00081609-03	820	

Scott Gierhart
Chemist
Ext. 6320

(6)

EASTERN MUNICIPAL WATER DISTRICT

Date: September 1, 2000

To: Sanchez Hauling (FAX 909-356-0932)

From: John Jannone
Perris Treatment (FAX 909-943-5841 Phone 943-2997)

Subject: Sludge Hauling

Pages including cover: 2

I have received two gross weight tickets for truck, trailer and load for 69,050 and 69 160 pounds plus one ticket for weight of truck and trailer for 28,570 pounds. Subtracting 28,570 from the average gross weight of 69,105 pounds equals 40,535 pounds or 20.27 tons of sludge hauled per load (7 scoops).

Based on these figures, 59 loads can be applied to Pedro's alfalfa field and 5 load can be applied to the field directly east of our headquarters.

Let me know if you have any questions or concerns.

Analytical Results Report
Perris Valley RWRF

Sample Id: E00072106-05
Client Id: PVPPMIX503
Location: PASTEURIZE_STOCKPILE
Project: PV-503
Collect Date: 21-JUL-00
Comments:

Parameter	Value	Units
Total Nitrogen	64485.	mg/kgDry
Mercury	1.8	mg/kgDry
Potassium	3600	mg/kgDry
Total Kjeldahl Nitrogen	64500	mg/kgDry
Ammonia as N	11400	mg/kgDry
Nitrite as N	0.91	mg/kgDry
Total Phosphate as P	34400	mg/kgDry
Nitrate as N	17.	mg/kgDry
Electrical Conductance	3130	umhos/cm
Priority Pollutant Metals		
Antimony	1.2	mg/kgDry
Arsenic	12.	mg/kgDry
Barium	580	mg/kgDry
Beryllium	0.25	mg/kgDry
Cadmium	1.6	mg/kgDry
Total Chromium	13.	mg/kgDry
Cobalt	1.2	mg/kgDry
Copper	420	mg/kgDry
Iron	3300	mg/kgDry
Lead	4.1	mg/kgDry
Manganese	110	mg/kgDry
Molybdenum	9.7	mg/kgDry
Nickel	12.	mg/kgDry
Silver	3.7	mg/kgDry
Thallium	< 1.1	mg/kgDry
Zinc	470	mg/kgDry
pH	7.3	units
Total Solids	93.	%

072106-05 (EC) - pH & EC 1:10 EXTRACTION

Approved By: 08/15/00